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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,427	05/16/2001	Donald R. Ryan	D/A0477Q1	3478

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EXAMINER	
HUNTSINGER, PETER K	
ART UNIT	**PAPER NUMBER**
2625	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/858,427	RYAN ET AL.	
	Examiner	Art Unit	
	Peter K. Huntsinger	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-18,20-31,33 and 34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-18,20-31,33 and 34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/13/06 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 34 is rejected under 35 U.S.C. 102(b) as being anticipated by Krist et al. Patent 5,615,015.

Krist et al. disclose a printing network comprising: at least one printing apparatus for marking print media (printer 8 of Fig. 2); at least one finishing device for applying finishing routines to the print media (finisher 120 of Fig. 2), the finishing device receiving electronic instructions before the printing apparatus applies markings to the print media

for programming and configuring the finishing device and finishing the print media (col. 10, lines 53-63); and at least one media pathway leading from the printing apparatus to the finishing device that transports printed media to the finishing device (col. 7, lines 15-18).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 4-7, 10-18, 20, 22, 23, 26, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salgado Patent 5,579,087, and in further view of Newell, Jr. et al. U.S. Patent 6,249,666.

Referring to claim 1, Salgado discloses in a finishing system having at least one finishing device that is controlled separately from production equipment and that is to be used during a finishing job, a method for limiting human invention in a finishing job process with a finishing job coordinator, comprising: a) electronically receiving finishing job description information before commencement of a printing job, including information descriptive of the job and identification of job segments of the job (264 of Fig. 7, col. 7, lines 22-27); and b) communicating programming data for programming and configuring device attributes of at least one finishing device for implementation of the finishing job by automatically programming the finishing device over a

communication network (272 and 274 of Fig. 7, col. 7, lines 36-44). Salgado does not disclose expressly propagating job segments from printing outputs to finishing inputs. Newell, Jr. et al. disclose automatically propagating job segments from outputs of printing devices to inputs of finishing devices (col. 2-3, lines 59-67, 1-3). Salgado and Newell, Jr. et al. are combinable because they are from the same field of printing and finishing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to feed a page job from a printer into a finishing device. The motivation for doing so would have been to eliminate the work of a user picking up and depositing pages from a printer to a finishing device. Therefore, it would have been obvious to combine Newell, Jr. et al. with Salgado as specified in claim 1.

Referring to claim 4, Salgado discloses the step of communicating but does not disclose expressly identifying the input locations of the finishing devices. Newell, Jr. et al. disclose identifying the input locations to the finishing device in which the job segments are to be placed (Fig. 4, col. 8, lines 16-22). Salgado and Newell, Jr. et al. are combinable because they are from the same field of printing and finishing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to identify an input location of a finishing device. The motivation for doing so would have been to program a path for the print job to printed by a series of devices. Therefore, it would have been obvious to combine Newell, Jr. et al. with Salgado as specified in claim 4.

Referring to claim 5, Salgado discloses wherein the step of receiving comprises receiving a job segment identifier for at least one job segment (col. 6, lines 18-19, 43-53).

Referring to claim 6, Salgado discloses using the job segment identifier to retrieve finishing job information relating to the job segment from a data source wherein a finishing job model pertaining to the finishing job is stored (236 of Fig. 6, col. 7, lines 14-19).

Referring to claim 7, Salgado discloses using the job segment identifier to retrieve finishing job information for all job segments of the finishing job (col. 6, lines 43-53).

Referring to claim 10, Salgado discloses wherein the step of receiving further comprises receiving the job segment identifier from a virtual finishing job ticket reader (col. 6, lines 15-18). The user interface can be considered a virtual finishing job ticket reader because it displays an electric record of printing and finishing characteristics.

Referring to claim 11, Salgado discloses wherein the step of receiving further comprises receiving a job segment identifier entered by a human operator (col. 6, lines 43-53).

Referring to claim 12, Salgado discloses wherein the step of receiving finishing job description further comprises receiving information identifying at least one finishing device to be used in performance of the finishing job (col. 6, lines 54-65).

Referring to claim 13, Salgado discloses determining whether the identified finishing device is available for performance of the finishing job (col. 4, lines 44-64).

Referring to claim 14, Salgado discloses in response to determining that the identified device is not currently available, communicating issuing commands to program the availability of the identified device (col. 4, lines 44-64).

Referring to claim 15, Salgado discloses in response to determining that the identified device is not currently available, notifying human operators that the identified device is not available (col. 4, lines 44-64).

Referring to claim 16, Newell, Jr. et al. disclose in response to determining that the identified device is not currently available, amending the job model to select a different thread for finishing of the job (212 of Fig. 5, col. 8, lines 64-65).

Referring to claim 17, Newell, Jr. et al. disclose creating different job segments in order to conform to the amended job model (212 of Fig. 5, col. 8, lines 64-65).

Referring to claim 18, Newell, Jr. et al. disclose wherein the step of receiving information identifying at least one finishing device further comprises identifying finishing devices to be used during a portion of the finishing job wherein devices remain unidentified for at least one finishing operation to occur after performance by the identified devices (col. 9, lines 52-54).

Referring to claim 20, Newell, Jr. et al. disclose programming at least one finishing device in adaptation to the capability and constraint attributes of a second finishing device (212 of Fig. 5, col. 8, lines 64-65).

Referring to claim 22, Newell, Jr. et al. disclose a) receiving data that job segments of the job have been placed in at least one input location of the finishing device; and b) after receiving data that the job segments have been placed in such input

location, issuing instructions for the commencement of operation by the finishing device (col. 9, lines 22-39).

Referring to claim 23, Salgado discloses providing data for tracking the finishing job (col. 7, lines 51-53).

Referring to claim 26, Salgado discloses wherein the step of tracking further comprises monitoring the condition of at least one finishing device used in performance of the job (col. 4, lines 44-64).

Referring to claim 31, Salgado discloses sending tracking data for a completed job to a central database of the finishing system (col. 4, lines 44-64).

6. Claims 8, 9, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salgado Patent 5,579,087 and Newell, Jr. et al. U.S. Patent 6,249,666 as applied to claims 6 and 23 above, and further in view of Kageyama et al. Patent 5,625,757.

Referring to claim 8, Salgado discloses job segments identified in a job model but do not disclose expressly status information of the job segments. Kageyama et al. disclose extracting status information relating to job segments (col. 19, lines 20-32). Salgado and Kageyama et al. are combinable because they are from the same field of printing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide status for print jobs. The motivation for doing so would have been to provide a progress of the print job to the user. Therefore, it would have been obvious to combine Kageyama et al. with Salgado as specified in claim 8.

Referring to claim 9, Kageyama et al. disclose notifying an operator if at least one job segment is not in a status ready for finishing (col. 17, lines 9-10).

Referring to claim 25, Salgado discloses wherein the at least one job segment is identifiable by a job segment identifier, but does not disclose expressly tacking the job segment identifier. Kageyama et al. disclose tracking the job segment by tracking its job segment identifier as such job segment identifier moves through the finishing job (col. 19, lines 20-32). Salgado and Kageyama et al. are combinable because they are from the same field of printing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to track a print job by tracking an identifier. The motivation for doing so would have been to provide a progress of the print job to the user. Therefore, it would have been obvious to combine Kageyama et al. with Salgado as specified in claim 25.

7. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Salgado Patent 5,579,087 and Newell, Jr. et al. U.S. Patent 6,249,666 as applied to claim 1 above, and further in view of applicant's prior art.

Referring to claim 21, Salgado discloses the step of communicating but does not disclose expressly using the Modular Feeding and Finishing Architecture. On page 43, lines 16-22 of the specification, the applicant discloses the Modular Feeding and Finishing Architecture. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize the Modular Feeding and Finishing Architecture with the printing system of Salgado. The motivation for doing so would

have been to determine the available of connected devices. Therefore, it would have been obvious to utilize the Modular Feeding and Finishing Protocol with the system of Salgado to obtain the invention as specified in claim 21.

8. Claims 24 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salgado Patent 5,579,087 and Newell, Jr. et al. U.S. Patent 6,249,666 as applied to claims 23 and 26 above, and further in view of Allen et al. Patent 6,549,299

Referring to claim 24, Salgado discloses providing data for tracking the finishing job but does not disclose expressly a sheet counting feature. Allen et al. disclose using a sheet counting feature of at least one finishing device to count sheets (col. 6, lines 28-36). Salgado and Allen et al. are combinable because they are from the same field of printing and finishing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a sheet counting feature. The motivation for doing so would have been to track the progress of the print job in relation to pages printed. Therefore, it would have been obvious to combine Allen et al. with Salgado as specified in claim 24.

Referring to claim 27, Salgado discloses monitoring the condition of at least one finishing device but does not disclose expressly adjusting perform conditions in response to the tracked condition. Allen et al. disclose in response to a tracked condition of at least one finishing machine, issuing commands to adjust performance conditions of at least one finishing device (col. 5-6, lines 61-67, 1-6). Salgado and Allen et al. are combinable because they are from the same field of printing and finishing

systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to adjust the performance of a printing device in response to a tracked condition of the device. The motivation for doing so would have been to reduce the use of a malfunctioning printing device. Therefore, it would have been obvious to combine Allen et al. with Salgado as specified in claim 27.

Referring to claim 28, Salgado discloses providing data for tracking the finishing job but does not disclose expressly issuing a pause command to a finishing device. Allen et al. disclose the method of claim 23, further comprising, in response to a pause in performance of at least one finishing device, issuing commands to pause at least one other finishing device (col. 5, lines 51-60). Salgado and Allen et al. are combinable because they are from the same field of printing and finishing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to issue a pause command to a finishing device. The motivation for doing so would have been to prevent the use of a malfunctioning printing device. Therefore, it would have been obvious to combine Allen et al. with Salgado as specified in claim 28.

Referring to claim 29, Allen et al. disclose the method of claim 28, wherein the pause in performance is caused by the jamming of work pieces within the finishing device (col. 5-6, lines 61-67, 1-3).

Referring to claim 30, Allen et al. disclose the method of claim 28, further comprising issuing restart commands after the cause of the pause has been cured (col. 6, lines 28-48).

9. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al. U.S. Patent 6,549,299 and Newell, Jr. et al. U.S. Patent 6,249,666.

Newell, Jr. et al. disclose in a finishing system having at least one database for storing information concerning the capability and constraint attributes of devices within the system and for storing job segment description information and for storing a job model that includes a description of the components of a job together with the order in which the components are to be assembled (memory 114 of Fig. 1, col. 3, lines 59-66), a method for a finishing module coordinator, comprising: sending job segment and job model information from the at least one database to at least one finisher before a corresponding print job is initiated (col. 7, lines 18-33); and determining the status of devices to be used for processing the job (col. 7, lines 18-26). Newell, Jr. et al. do not disclose determining the status of the job segments or monitoring the performance of the devices. Allen et al. disclose determining the status of job segments (col. 5, lines 5-14); and monitoring performance of the job as the devices operate (col. 5, lines 5-14). Allen et al. and Newell, Jr. et al. are combinable because they are in the same field of finishing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the finishing system of Newell, Jr. et al. to email status information when a job is completed or in error. The motivation for doing so would have been to inform the user as to the status of their document. Therefore, it would have been obvious to combine Allen et al. with Newell, Jr. et al. to obtain the invention as specified in claim 33.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter K. Huntsinger whose telephone number is (571)272-7435. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (571)272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PKH

KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER